NC	4		Nitrate-N (≤ 10 mg/L) Nitrite (2.7 µg/L) [NUM]				Chlorophyll a: no greater than 40 µg/L for lakes, reservoirs, and other waters subject to growths of macroscopic or microscopic vegetation not designated as trout waters, and no greater than 15 ug/l for lakes, reservoirs, and other waters subject to growths of macroscopic or microscopic vegetation designated as trout waters (not applicable to lakes and reservoirs less than 10 acres in surface area). [NUM]				In HQW and ORW where nutrient overenrichment is projected to be a concern, appropriate effluent limitations shall be set for phosphorus or nitrogen, or both. [NAR] 15A NCAC 02B .0223 Nutrient strategies applicable to Nutrient Sensitive Waters shall be developed by the Commission to control the magnitude, duration, or frequencies of excessive growths of microscopic or macroscopic vegetation so that the existing and designated uses of the waterbody are protected or restored. [NAR]	Not less than 6.0 mg/L for trout waters. [NUM] Daily average not less than 5.0 mg/L for non-trout waters with a minimum instaneous value of not less than 5.0 mg/L. [NUM]	
ND	8		Nitrate+Nitrite (≤ 10mg/L) for municipal/domestic drinking water supply waters; (1 mg/L) for class I streams Nitrite (≤ 1,000 µg/L) human health [NUM]	TP (0.1 mg/L) MCL for class I streams. [NUM]		Elemental P (0.1 µg/L) for saltwater aquatic life. [NUM]							State has specific numeric DO criteria for specific water bodies ranging from 5.0-9.5 mg/L. [NUM]	
NE	7	State has specific numeric N criteria for specific lakes and impounded waters ranging from ≤ 520 µg/L-1960 µg/L. [NUM]	Nitrite-N (≤ 1mg/L); Nitrate-N (≤ 10mg/L); Nitrate+Nitrite for agricultural purposes and wetlands (≤ 100 mg/L) [NUM]	State has specific numeric P criteria for specific lakes and impounded waters ranging from ≤ 36-1050 µg/L. [NUM]			State has specific numeric chlorophyll a criteria for specific lakes and impounded waters ranging from 5-44 µg/L. [NUM]						State has specific numeric DO criteria for specific water bodies ranging from 3.0-9.5 mg/L. [NUM]	
NH	1		Nitrates (≤ 10 mg/L) human health criteria. [NUM]					See eutrophication and other response variables. [NAR]	Existing discharges containing either phosphorus or nitrogen which encourage cultural eutrophication shall be treated to remove phosphorus or nitrogen to ensure attainment and maintenance of water quality standards. There shall be no new or increased discharge(s) containing phosphorus or nitrogen to tributaries of lakes or ponds that would contribute to cultural eutrophication or growth of weeds or algae in such lakes and ponds. [NAR]	Class A waters shall contain no phosphorus or nitrogen unless naturally occurring and Class B waters shall contain no phosphorus or nitrogen in such concentrations that would impair any existing or designated uses, unless naturally occurring. There shall be no new or increased discharge of phosphorus into lakes or ponds. [NAR]		State has specific numeric DO criteria for specific water bodies ranging from 5.0-9.5 mg/L and 75% saturation. [NUM]	
NJ	2		Nitrate-N (≤ 2 mg/L) in Pineland Waters; Nitrates ≤ (10,000 µg/L). [NUM]	≤ 0.1 mg/L in non-tidal streams and ≤ 0.05 mg/L in lakes. [NUM]				Except as due to natural conditions, nutrients shall not be allowed in concentrations that render the waters unsuitable for the existing or designated uses due to objectionable algal densities, nuisance aquatic vegetation, diurnal fluctuations in dissolved oxygen or pH indicative of excessive photosynthetic activity, detrimental changes to the composition of aquatic ecosystems, or other indicators of use impairment caused by nutrients. [NAR]		See nuisance aquatic vegetation. [NAR]		State has specific numeric DO criteria for specific water bodies ranging from 3.0-7.0 mg/L. [NUM]	
NM	6		Nitrates in domestic water supply (≤ 10 mg/L) Nitrate+Nitrite in livestock watering (≤ 132 mg/L). [NUM]	Less than 0.1 mg/L (unfiltered sample) for specific water bodies. [NUM]				Plant nutrients from other than natural causes shall not be present in concentrations that will produce undesirable aquatic life or result in a dominance of nuisance species in surface waters of the state. [NAR]				State has specific numeric DO criteria for specific water bodies ranging from 4.0-6.0 mg/L. [NUM]	
NV	9	State has specific numeric N criteria for specific water bodies ranging from ≤ 0.25 mg/L to 20 mg/L. [NUM]	State has specific numeric N criteria for specific water bodies ranging from ≤ 10 mg/L to 100 mg/L for Nitrates and for Nitrites ≤ 0.06 mg/L to 10 mg/L [NUM]	State has specific numeric P criteria for specific water bodies ranging from ≤ 0.025 mg/L to 0.82 mg/L. [NUM]	State has specific numeric P criteria for specific water bodies ranging from ≤ 0.01 mg/L to 0.82 mg/L for Phosphates. [NUM]	Specific soluble P, TN, nitrite, TN soluble inorganic numeric criteria for Lake Tahoe. [NUM]						State has specific numeric DO criteria for specific water bodies ranging from 3.0-8.0 mg/L. [NUM]	

State has specific numeric turbidity criteria for specific water bodies ranging from 10-50 NTU. [NUM]			All standards except toxics and aesthetics use 7Q10 flow			Nutrient Offset requirements in Standards for Nutrient Sensitive waters. Tar Pam dischargers must reduce TN and TP discharges by 30% from 1991 annual average. And any expansions cannot increase annual average discharge about 70%. Neuse River discharger reduce total load of TN by 30%. Permit limits based on flow and weather or not the facility is new or expanding. For other Nutrient Sensitive waters NC rule spells out a plan and BMP to be used in each watershed.	Effective November 26, 2007	http://water.epa.gov/scitech/swguidance/standards/wqslibrary/nc_index.cfm	Effective April 1, 2003	http://portal.ncdenr.org/web/wq/ps/csu/swstandards		
	Free from floating debris, oil, scum, and other floating materials attributable to municipal, industrial, or other discharges or agricultural practices in sufficient amounts to be unsightly or deleterious; practices producing color, odor, or other conditions to such a degree as to create a nuisance or render any undesirable taste to fish flesh or, in any way, make fish inedible. [NAR]					The standard for nitrates (1 mg/L) is an interim guideline limit. In addition, these nutrient parameters are guidelines for use as goals in any lake or reservoir improvement or maintenance program: 0.25 mg/L for NO3 as N and 0.02 mg/L for PO4 as P.	Effective June 15, 2001	http://water.epa.gov/scitech/swguidance/standards/wqslibrary/nd_index.cfm	Effective June 1, 2001	http://www.legis.nd.gov/information/acdata/pdf/33-16-02.1.pdf	Link on ND Dept. of Health does not exist.	
See "Free froms" [NAR]	This use applies to all surface waters of the state. To be aesthetically acceptable, waters shall be free from human-induced pollution which causes: noxious odors; floating, suspended, colloidal, or settleable materials that produce objectionable films, colors, turbidity, or deposits; and the occurrence of undesirable or nuisance aquatic life (e.g., algal blooms). Surface waters shall also be free of junk, refuse, and discarded dead animals. [NAR]						Effective September 30, 2010	http://water.epa.gov/scitech/swguidance/standards/wqslibrary/ne_index.cfm	Effective April 1, 2012	http://www.deq.state.ne.us/RuleAndR.nsf/pages/117-TOC		
Class A waters shall contain no turbidity, unless naturally occurring. [NAR] Class B waters shall not exceed naturally occurring conditions by more than 10 NTUs. [NUM]	All surface waters shall be free from substances in kind or quantity which: Float as foam, debris, scum, or other visible substances; Produce odor, color, taste or turbidity which is not naturally occurring and would renderit unsuitable for its designated uses; Result in the dominance of nuisance species; or Interfere with recreational activities. [NAR]						Effective December 12 1999	http://water.epa.gov/scitech/swguidance/standards/wqslibrary/nh_index.cfm	2010	http://des.nh.gov/organization/commissioner/legal/rules/index.htm#waterq		
State has specific suspended solids criteria ranging from 25-40 mg/L. [NUM] None of which would render the water unsuitable for the designated uses. [NAR] State has specific turbidity criteria ranging from 10-50 NTU. [NUM]	Floating, colloidal, color and settleable solids; petroleum hydrocarbons and other oils and grease - none noticeable in the water or deposited along the shore or on the aquatic substrata in quantities detrimental to the natural biota. None which would render the waters unsuitable for the designated uses. [NAR]					Developed New Jersey Nutrient Criteria Enhancement Plan	Effective June 30, 2011	http://water.epa.gov/scitech/swguidance/standards/wqslibrary/nj_index.cfm	Re-adopted: November 16, 2009 (41 N.J.R. 4735(a)) Last Amended – April 4, 2011 (43 N.J.R. 833(a))	http://www.nj.gov/dep/wms/bwqsa/swqs.htm		
Turbidity attributable to non-natural causes shall not reduce light transmission to the point that the normal growth, function or reproduction of aquatic life is impaired or that will cause substantial visible contrast with the natural appearance of the water. [NAR] Activities or discharges shall not cause turbidity to increase more than 10 NTU over background turbidity when the background turbidity, measured at a point immediately upstream of the activity, is 50 NTU or less, nor to increase more than 20 percent when the background turbidity is more than 50 NTU. However, limited-duration turbidity increases may be allowed provided all practicable turbidity control techniques have been applied and all appropriate permits, certifications and approvals have been obtained. [NUM]	Surface waters of the state shall be free of oils, scum, grease and other floating materials resulting from other than natural causes that would cause the formation of a visible sheen or visible deposits on the bottom or shoreline, or would damage or impair the normal growth, function or reproduction of human, animal, plant or aquatic life. Color-producing materials resulting from other than natural causes shall not create an aesthetically undesirable condition nor shall color impair the use of the water by desirable aquatic life presently common in surface waters of the state. Water contaminants from other than natural causes shall be limited to concentrations that will not result in offensive odor or taste arising in a surface water of the state or otherwise interfere with the reasonable use of the water. [NAR]						Effective December 29, 2006	http://water.epa.gov/scitech/swguidance/standards/upload/2007_04_05_standards_wqslibrary_nm_nm_6_wqs.pdf	2000	http://www.nmenv.state.nm.us/swqb/Standards/index.html		
See "Free froms" [NAR] State has specific numeric turbidity criteria for specific water bodies ranging from 10-50 NTU and 10 NTU/JTU above natural conditions. [NUM]	Waters must be free from materials attributable to domestic or industrial waste or other controllable sources in amounts sufficient to produce taste or odor in the water or detectable off-flavor in the flesh of fish or in amounts sufficient to change the existing color, turbidity or other conditions in the receiving stream to such a degree as to create a public nuisance or in amounts sufficient to interfere with any beneficial use of the water. [NAR] State has specific numeric color criteria for specific water bodies ranging from 10 PCU above natural conditions to ≤ 75 PCU. [NUM]						Effective May 15, 2007	http://water.epa.gov/scitech/swguidance/standards/wqslibrary/nv_index.cfm	2008	http://ndep.nv.gov/bwqp/stdsw.htm		

NY	2		Nitrate and Nitrate+Nitrite (≤ 10,000 µg/L) [NUM]					No nutrients allowed in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages. [NAR]				State has specific numeric DO criteria for specific water bodies ranging from 3.0-7.0 mg/L. [NUM]	
OH	5		Individual basin standards provide Nitrate+Nitrite (10 mg/L, 10,000 µg/L) and Nitrite-N (1,000 µg/L) human health criteria [NUM]					EPA: OH 3745-1-04(E): Free from nutrients entering the waters as a result of human activity in concentrations that create nuisance growths of aquatic weeds and algae. [NAR] Wetland Criteria: Water quality shall be protected to prevent conditions conducive to the establishment or proliferation of nuisance organisms. [NAR]		Wetland Criteria: The hydrology necessary to support the biological and physical characteristics naturally present in wetlands shall be protected to prevent significant adverse impacts on: chemical, nutrient and dissolved oxygen regimes of the wetland. [NAR]			
OK	6			EPA: 785:45-5-10(8) Phosphorus numeric criterion applicable to certain waters (TP= 0.0141 mg/L-0.0166 mg/L). [NUM] 785:45-5-19.(c)(2). The 30 day geometric mean TP concentration in waters designated "Scenic River" in Appendix A shall not exceed (0.037 mg/L). [NUM]			EPA: OK 785:45-5-10(7). The long term average concentration of chlorophyll-a at a depth of 0.5 meters below the surface shall not exceed (0.010 mg/L) in certain public/private water supplies. Wherever such criterion is exceeded, numerical phosphorus or nitrogen criteria or both may be promulgated. [NUM]	EPA: OK 785:45-5-9(d). Nutrients from point source discharges or other sources shall not cause excessive growth of periphyton, phytoplankton, or aquatic macrophyte communities which impairs any existing or designated beneficial use. [NAR]			EPA: 785:45-5-4.(b). When numerical criteria do not apply, water column conditions including dissolved oxygen concentrations, organoleptic compounds, nutrients, and oil and grease shall be maintained to prevent nuisance conditions caused by man's activities. [NAR]		
OR	10		EPA: OR Table 20. Nitrates HH water, fish ingestion and drinking water (10 mg/L) [NUM]			EPA: OR 340-041-0225(3). Elemental P Marine Chronic (0.1 µg/L) average concentration for 96 hours (4 days), and that these criteria should not be exceeded more than once every three (3) years, TP (241, 123 lbs/year), Multiple Phosphorus TMDLs. [NUM]	EPA: 340-041-0019 For lakes, reservoirs, estuaries and streams, and excluding ponds and reservoirs less than ten acres in surface area, marshes and saline lakes: the following average Chlorophyll a values must be used to identify water bodies where phytoplankton may impair the recognized beneficial uses: Natural lakes that thermally stratify: (0.01 mg/L); Natural lakes that do not thermally stratify, reservoirs, rivers and estuaries: (0.015 mg/L) [NUM]						
PA	3		EPA: PA 25 chapter 93.7(a) Nitrate + Nitrate as N (10 mg/L) for public water supply. [NUM]									EPA: PA 93.7(a) For specific classes DO (min 4-7mg/L, daily average 5-6 mg/L) [NUM]	
PR	2		EPA: PR Rule 1303.1.1.1. Nitrate+Nitrite as N Class SD and SG (10,000 µg/L) for drinking water [NUM] Nitrate as N Nitrogen Class SG: (1,000 µg/L) for drinking water [NUM]	EPA: PR Rule 1303.2.D.2.h. TP for Class SD waters. TP shall not exceed (1 mg/L), in surface water bodies upstream from reservoirs, in segments of surface water bodies with drinking water intakes or estuarine waters except when it is demonstrated to the satisfaction of the Board that a higher value of total phosphorus in combination with prevailing nitrogen derived nutrients will not contribute to eutrophic conditions in the water body. [NUM]								EPA: PR 1303.2. For specific classes DO (min 4-5 mg/L) [NUM]	
RI	1			EPA: RI 8.D.(2)10. Average TP shall not exceed (0.025 mg/L) in any lake, pond, kettlehole or reservoir, and average TP in tributaries at the point where they enter such bodies of water shall not cause exceedance of this phosphorus criteria, except as naturally occurs, unless the Director determines, on a site-specific basis, that a different value for phosphorus is necessary to prevent cultural eutrophication. [NUM] [NAR]	EPA: RI 8.D(2)10. New discharges of wastes containing phosphates will not be permitted into or immediately upstream of lakes or ponds. Phosphates shall be removed from existing discharges to the extent that such removal is or may become technically and reasonably feasible. [NAR]			EPA: RI 8.D.(1)(d). Nutrients shall not exceed the limitations specified in rule 8.D.(2) and 8.D.(3) and/or more stringent site-specific limits necessary to prevent or minimize accelerated or cultural eutrophication. [NAR] EPA: RI 8.D(3)10. Total phosphorus, nitrates and ammonia may be assigned site-specific permit limits based on reasonable Best Available Technologies. Where waters have low tidal flushing rates, applicable treatment to prevent or minimize accelerated or cultural eutrophication may be required for regulated nonpoint source activities. [NAR]		EPA: RI 8.D.(2)10. and 3(10) None (nutrients) in such concentration that would impair any usages specifically assigned to said Class, or cause undesirable or nuisance aquatic species associated with cultural eutrophication, nor cause exceedance of the criterion. [NAR]		

Turbidity - no increase that will cause a substantial visible contrast to natural conditions. Suspended solids - none from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages. [NAR] Turbidity shall not exceed 5 ephelometric units. [NUM]	Taste, color, and odor-producing, toxic and other deleterious substances - none in amounts that will adversely affect the taste, color or odor thereof, or impair the waters for their best usages. [NAR] Color shall not exceed 15 color units (platinum-cobalt method). Odor shall not exceed a threshold odor number of 3. [NUM]					Nutrient Standard Plan (revised 7/7/2011): Ambient water quality guidance value of 20 µg/L for phosphorus.	Effective June 12, 2008	http://water.epa.gov/scitech/swguidance/standards/wqslibrary/ny_index.cfm	2008	http://www.dec.ny.gov/regs/4590.html		
	N/A				Nuisance organisms, as that term is defined in rule 3745-1-50 of the Administrative Code.		Effective: October 15, 1996 Rule review date: 3/1/02 Prior effective dates: 2/14/78, 4/4/85	http://water.epa.gov/scitech/swguidance/standards/wqslibrary/oh_index.cfm	Review dates: 03/29/2007 and 03/29/2012	http://www.epa.state.oh.us/dsw/wqs/index.aspx	Wetland criteria: Effective: May 1, 1996, Review date May 1, 2003 Lake Erie and Ohio Basin Drainage Plans: 2002, last updated on October 20, 2009	EPA has outdated information: http://www.epa.gov/r5water/wqs5/decisions.htm#OH WQS packages to EPA for approval.
	N/A						1/12/2012	http://water.epa.gov/scitech/swguidance/standards/upload/owqs_chapter45.pdf	7/1/2011	http://www.owrb.ok.gov/util/rules/pdf_rul/RulesCurrent2011/Ch45-Current2011.pdf	Same for both EPA and state. 2012 EPA Review: The following new provisions are currently under review by EPA: • 785.45-5-12(f)(1)(D)(v) - Dissolved Oxygen, Support tests for WWAC lakes. • 785.45-5-12(f)(1)(D)(vii) - Dissolved Oxygen, Water Column criteria for WWAC lakes. All other provisions in this document have been approved by the EPA and are in effect for Clean Water Act purposes.	
	N/A					Average Chlorophyll a values may be based on the following methodology (or other methods approved by the Department): A minimum of three samples collected over any three consecutive months at a minimum of one representative location (e.g., above the deepest point of a lake or reservoir or at a point mid-flow of a river) from samples integrated from the surface to a depth equal to twice the secchi depth or the bottom (the lesser of the two depths); analytical and quality assurance methods must be in accordance with the most recent edition of Standard Methods for the Examination of Water and Wastewater.	Effective July 2nd, 2007	http://water.epa.gov/scitech/swguidance/standards/upload/2008_06_18_standards_wqslibrary_or_or_10_wqs.pdf	The Oregon Administrative Rules contain OARs filed through July 13, 2012	http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_041.html		
TDS for PWS 500 mg/l as a monthly average value; maximum 750 mg/l. [NUM]	EPA: PA 25 section 93.6(a) Water may not contain substances attributable to point or non point source discharges in concentration or amounts sufficient to be inimical or harmful to the water uses to be protected or to human, animal, plant or aquatic life. [NAR] (b) In addition to other substances listed within or addressed by this chapter, specific substances to be controlled include,but are not limited to, floating materials, oil, grease, scum and substances that produce color, tastes, odors, turbidity or settle to form deposits. [NAR] EPA: PA 93.7(a) For PWS Color Maximum 75 units on the platinum-cobalt scale; no other colors perceptible to the human eye. [NUM] [NAR]					EPA PA 93.9: Notes of Decisions. Regulations contemplate that the Department will evaluate the degree to which phosphorus contributes to the impairment designated uses on a case-by-case basis and may impose more stringent limitations where necessary. Neshaminy Water Resources Authority v. Department of Environmental Resources, 513A.2d979,981 (Pa.1986).	3/12/2012	http://water.epa.gov/scitech/swguidance/standards/wqslibrary/pa_index.cfm	The provisions of this Chapter 93 adopted September 10, 1971, effective September 11, 1971, 1 Pa.B. 1804; amended September 7, 1979, effective October 8, 1979, 9 Pa.B. 3051, unless otherwise noted. Webpage list separate dates for each section.	http://www.pacode.com/secure/data/025/chapter93/chap93toc.html		
	EPA: PR 1303.1.A. Solids and Other Matter The waters of Puerto Rico shall not contain floating debris, scum or other floating materials attributable to discharges in amounts sufficient to be unsightly or deleterious to the existing or designated uses of the water body. [NAR] B. Color, Odor, Taste and Turbidity The waters of Puerto Rico shall be free from color, odor, taste or turbidity attributable to discharges in such a degree as to create a nuisance to the enjoyment of the existing or designated uses of the water body. [NAR]				Eutrophic Conditions Presence of high concentrations of nutrients causing excessive growth of algae and other aquatic plants in the water body.	Class SG: For the protection of ground waters with the potential to be used or that are used as source of drinking water supply, the applicable water quality standard is the Drinking Water (DW) or Hurnan Health (HH) criteria. For those ground waters that flow into other water bodies, the applicable water quality standard for ground waters is the most stringent criteria resulting from the comparison between the standard applicable to the classification of the water body into which it flows and the DW or HH criteria applicable to ground waters.	8/4/2010	http://water.epa.gov/scitech/swguidance/standards/wqslibrary/pr_index.cfm	3/31/2010	http://www2.pr.gov/agencias/jca/Documents/Leyes%20y%20Reglamentos/Reglamentos/Reglamentos/Water%20Quality%20Standards%20Regulation%202010.pdf	The original Water Quality Standards Regulation was filed in the Department of State on January 4, 1974, and subsequent amendments were made on May 1974, October 1976 and February 1983, November 1987, July 1990, and March 2003	Same WQS for both EPA and state.
	N/A						July 2006 Amended May 2009	http://water.epa.gov/scitech/swguidance/standards/wqslibrary/upload/nwqs.pdf	July 2006 Amended December 2010	http://www.dem.ri.gov/pubs/regs/regs/water/h2oq10.pdf	EPA does not have most recent.	

SC	4		EPA: SC Section E.11.b. Ecoregional Nitrogen standards (shall not exceed 0.35-1.50 mg/L) [NUM]	EPA: SC Section E.11.b. Ecoregional Phosphorus standards (shall not exceed 0.02-0.09 mg/L) [NUM]			EPA: SC Section E.11.b. Ecoregional Chlorophyll a standards (shall not exceed 10-40 µg/L) [NUM]	EPA: SC Section E.11.a. Discharges of nutrients from all sources, including point and nonpoint, to waters of the State shall be prohibited or limited if the discharge would result in or if the waters experience growths of microscopic or macroscopic vegetation such that the water quality standards would be violated or the existing or classified uses of the waters would be impaired. [NAR]					
SD	8		EPA: SD 74:51:01:44. Nitrates-N for domestic water supply (less than 10 mg/L) [NUM] EPA SD 74:51:01:52. Nitrates-N for fish and wildlife propagation, recreation and stock watering (less than 50 mg/L 30-day average, 88 mg/L daily max) [NUM]									EPA: SD 74:51:01:45. State has specific numeric DO criteria for specific water classes ranging from (min 4-7 mg/L) [NUM]	
TN	4		EPA: TN Rule 1200-4-3-.08 Groundwater Nitrate-N (10.0 mg/L); Nitrite-N (1.0 mg/L) Total Nitrate+Nitrite (10.0 mg/L) (as Nitrate) [NUM]				EPA: TN Rule 1200-4-3-.03(4)(i) Site specific Chlorophyll a (18 µg/L) April - September. [NUM]	EPA: TN Rule 1200-4-3-.03(4)(h) The waters shall not contain nutrients in concentrations that stimulate aquatic plant and/or algae growth to the extent that the public's recreational uses of the waterbody or other downstream waters are detrimentally affected. [NAR]			EPA: TN Rule 1200-4-3-.03 (3)(k) For Fish and Aquatic Life: The waters shall not contain nuttients in concentrations thal stimulate aquatic plant and/or algae growth to the extent that aquatic habitat is substantially reduced and/or the biological integrity fails to meet regional goals. Additionally, the quality of downstream waters shall not be detrimentally affected. Interpretation of this provision may be made using the document Development of Regionally-based Interpretations of Tennessee's Narrative Nutrient Criterion and/or other scientifically defensible methods. [NAR]	EPA: TN Rule 1200-4-3-.03 There shall always be sufficient DO present to prevent odors of decomposition and other offensive conditions. [NAR] EPA: TN Rule 1200-4-3-.03(3)(a) For fish and aquatic life DO (min 4-8 mg/L) [NUM]	
TX	6	Nitrate-N (as TN) (10.000 µg/L) MCL human health - water and fish. [NUM]					Numeric chlorophyll a criteria for specific reservoirs range from (2.15-53.05 µg/L). [NUM]				Nutrients from permitted discharges or other controllable sources must not cause excessive growth of aquatic vegetation that impairs an existing, designated, presumed, or attainable use. [NAR]	Dissolved oxygen concentrations must be sufficient to support existing, designated, presumed, and attainable aquatic life uses. [NAR] DO criteria based on aquatic life use subcategory and freshwater/saltwater with mean values ranging from (2.0-6.0 mg/L) and minimum values ranging from (1.5-5.0 mg/L). [NUM] State has specific DO criteria for specific waters ranging from (1-6 mg/L) 24 hour minimum. [NUM]	
UT	8		Nitrates-N (10 mg/L) for domestic source. [NUM]									For aquatic wildlife: numeric values ranging from (3.0-9.5 mg/L) depending on water use (CWF, WWF, non-game fish, and waterfowl); sampling frequency (30 day avg., 7 day avg., or minimum value); and whether early or late life stages are present. [NUM] Site-specific criteria depending on time of year and sampling frequency. [NUM]	
VA	3		Nitrate-N for public water supply/human health (10,000 µg/L). [NUM]	CB: State has specific numeric TP criteria for lakes/reservoirs (received algicide) ranging from (10-40 µg/L); not to exceed 0.1 mg/L monthly avg and embayments. [NUM]		Elemental Phosphorus (chronic saltwater) (0.1 µg/L). [NUM]	CB: State has specific numeric chlorophyll a criteria for lakes/reservoirs (10-60 µg/L). [NUM] Concentrations of chlorophyll a in free-floating microscopic aquatic plants (algae) shall not exceed levels that result in undesirable or nuisance aquatic plant life, or render tidal waters unsuitable for the propagation and growth of a balanced, indigenous population of aquatic life or otherwise result in ecologically undesirable water quality conditions. [NAR]				Numeric DO, varies by Class and type of water (4-7 mg/L). [NUM] Chesapeake Bay: DO instantaneous minimums for specific water use ranging from (1-5 mg/L) [NUM]	Submerged aquatic vegetation & clarity (for shallow water submerged aquatic vegetation use) (Seasonal and range from 0 - 15,901 SAV acres). [NUM]
VI	2			TP shall not exceed 50 µg/L in any waters. [NUM]								Not less than 5.5 mg/L in Class B waters and 5.0 mg/L in Class C waters from other than natural conditions. [NUM]	A Secchi disc shall be visible at a minimum depth of 1 m. [NUM]

	N/A		Aquatic life criteria use the 7Q10 design flow or tidal conditions.			EPA: SC Section E.b. Numeric nutrient criteria for lakes are based on an ecoregional approach which takes into account the geographic location of the lakes within the State. Numeric criteria are applicable to lakes of 40 acres or more. Lakes of less than 40 acres will continue to be protected by the narrative criteria. [NAR] c. In evaluating the effects of nutrients upon the quality of lakes and other waters of the State, the Department may consider, but not be limited to, such factors as the hydrology and morphometry of the waterbody, the existing and projected trophic state, characteristics of the loadings, and other control mechanisms in order to protect the existing and classified uses of the waters. [NAR] d. The Department shall take appropriate action, to include, but not limited to: establishing numeric effluent limitations in permits, establishing Total Maximum Daily Loads, establishing waste load allocations, and establishing load allocations for nutrients to ensure that the lakes attain and maintain the above narrative and numeric criteria and other applicable water quality standards. [NAR]	6/25/2004	http://water.epa.gov/scitech/swguidance/standards/wqslibrary/upload/2006_02_01_standards_wqslibrary_sc_sc_4_wqs.pdf	Effective April 25, 2008	http://www.scdhec.gov/environment/water/regs/r61-68.pdf	EPA does not have most recent.	
	EPA: 74:51:01:05-12. Materials which produce nuisance aquatic life, cause pollutants to form, produce undesirable taste or odor, or are visible pollutants may not be discharged or mused to be discharged into surface waters of the state in concentrations that impair a beneficial use or create a human health problem or impair the aquatic community. [NAR]						Effective January 27, 1999 Date of upload 11/21/2003	http://water.epa.gov/scitech/swguidance/standards/wqslibrary/upload/2003_11_21_standards_wqslibrary_sd_sd_8_7451.pdf	5/12/2009 (date found for criteria for domestic water supply Webpage list separate dates for each section.	http://legis.state.sd.us/rules/DisplayRule.aspx?Rule=74:51:01		
EPA: TN Rule 1200-4-3-.03(1)(f) There shall be no turbidity or color in amounts or characteristics that cannot be reduced to acceptable concentrations by conventional water treatment processes. [NAR] EPA: TN Rule 1200-4-3-.03(3)(d) There shall be no turbidity, total suspended solids, or color in such amounts or of such character that will materially affect fish and aquatic life. In wadeable streams, suspended solid levels over time should not be substantially different than conditions found in reference streams. [NAR]	EPA: TN Rule 1200-4-3-.03(1)(e) Solids, Floating Materials and Deposits - There shall be no distinctly visible solids, scum, foam, oily slick, or the formation of slimes, bottom deposits or sludge banks of such size or character as may impair the usefulness of the water as a source of domestic water supply. [NAR]				Conventional Water Treatment - Conventional water treatment as referred to in the criteria denotes coagulation, sedimentation, filtration, and chlorination or disinfection.		Effective 3/27/08	http://water.epa.gov/scitech/swguidance/standards/wqslibrary/upload/2008_05_22_standards_wqslibrary_tn_nutrient-criteria-tn-rule.pdf	5/1/2011	http://www.tn.gov/sos/rules/1200/1200-04/1200-04-03.20110531.pdf	EPA does not have most recent.	
See "free froms" [NAR]	Surface water must be essentially free of floating debris and suspended solids, changes from ambient conditions of turbidity or color, and concentrations of taste and odor producing substances. [NAR]					Nutrient Criteria Development Work Plan for the State of Texas - revised and submitted on November 27, 2006.	Effective June 29, 2011	http://water.epa.gov/scitech/swguidance/standards/wqslibrary/tx_index.cfm		http://www.tceq.texas.gov/waterquality/standards/eq_swqs.html#nutrient-criteria-development		WQS packages to EPA for approval for chlorophyll a only.
Numeric increase in turbidity for recreation and aesthetics/CWF/WWF (10 NTU); non-game fish/waterfowl (15 NTU). [NUM]	It shall be unlawful, and a violation of these regulations, for any person to discharge or place any waste or other substance in such a way as will be or may become offensive such as unnatural deposits, floating debris, oil, scum or other nuisances such as color, odor or taste; or cause conditions which produce undesirable aquatic life or which produce objectionable tastes in edible aquatic organisms; or result in concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life, or undesirable human health effects. [NAR]					**Used as pollution indicators:** TP in lakes/reservoirs (0.025 mg/L); TP for recreation and aesthetics (0.05 mg/L); Nitrate-N for recreation and aesthetics (4 mg/L); TP for aquatic wildlife (0.05 mg/L); Nitrate-N for aquatic wildlife (4 mg/L), TP for aquatic life in lakes/reservoirs (0.025 mg/L)	Effective September 9, 2009	http://water.epa.gov/scitech/swguidance/standards/wqslibrary/ut_index.cfm	Effective July 1, 2012	http://www.waterquality.utah.gov/WQS/index.htm		
Suspended solids (WWTPs in Chickahominy watershed) - 5.0 mg/L monthly average, with not more than 5% of individual samples to exceed 7.5 mg/L. [NUM]	State waters, including wetlands, shall be free from floating debris, oil, scum, and other floating materials; toxic substances; substances that produce color, tastes, turbidity, odors, or settle to form sludge deposits; and substances which nourish undesirable or nuisance aquatic plant life. [NAR]					9VAC25-260-330 Designated "nutrient enriched waters" which have historical WQ data that indicates nutrient enrichment (chlor. A, DO, and TP).	Effective December 28, 2010 With Amendments effective January 6, 2011	http://water.epa.gov/scitech/swguidance/standards/wqslibrary/va_index.cfm		http://www.deq.state.va.us/Programs/Water/WaterQualityInformationTMDLs.aspx		
A maximum turbidity reading of 3 NTU shall be permissible. [NUM]	Waters shall be free of substances attributable to municipal, industrial, or other discharges or wastes as follows: Floating debris, oils, scum, and other matter; Substances producing objectionable color, odor, taste, or turbidity; Substances and conditions or combinations thereof in concentrations which produce undesirable aquatic life; or Exotic or aquatic nuisance species. [NAR]					U.S. Virgin Islands Nutrient Standards Plan - 2010	Effective June 29, 2010	http://water.epa.gov/scitech/swguidance/standards/wqslibrary/territories.cfm		N/A		

VT	1		State has specific numeric Nitrate-N criteria for specific waters ranging from 0.2 mg/L-5.0 mg/L. [NUM]	State has specific numeric TP criteria for specific waters ranging from 0.010 mg/L-0.054 mg/L. [NUM]				See eutrophication. [NAR]	In all waters, TP loadings/nitrates shall be limited so that they will not contribute to the acceleration of eutrophication or the stimulation of the growth of aquatic biota in a manner that prevents the full support of uses. [NAR]			Numeric DO, varies by class and type of water (5-7 mg/L, 60-95% saturation). [NUM]	
WA	10			TP criteria set for specific lakes at the ambient TP upper limit (e.g. Oligotrophic with ambient TP of > 4-10 µg/L, criterion is 10 µg/L or less. [NUM]								1 day minimum for specific waters ranging from 6.5 -9.5 mg/L for aquatic life. [NUM]	
WI	5			Monthly average of (1 mg/L) TP for specific dischargers. [NUM] AFOs shall use BMPs to achieve phosphorus criterion. [NAR] Atnerative TP limits may be made if (1 mg/L) is unachievable. [NAR] Specific rivers - (100 µg/L);Specific lakes/reservoirs - (15 µg/L-40 µg/L); Lake Michigan - (7 µg/L) Lake Superior - (5 µg/L) [NUM]						Wetlands- Hydrological conditions necessary to support the biologicaland physical characteristics naturally present in wetlands shall be protected to prevent significant adverse impacts on: the chemical, nutrient and dissolved oxygen regime of the wetland. Filtration/storage of sediments, nutrients or toxic substances that would otherwise adversely impact the quality of other waters of the state. [NAR]	Any wastewater discharger may be required to remove excess amounts of phosphorus. [NAR] Effluent limitations for TP based on surface water quality may be established where such limitations will result in an improvement in water quality, or preserve the quality of surface waters where long–term discharges may result in impairment of water quality. Such limitations for phosphorus shall include an evaluation of the discharges from point sources, nonpoint sources, background sources, tributaries, and a consideration of a margin of safety. [NAR]	CWF (trout streams) no less than 6.0 mg/L at any time and no less than 7.0 mg/L during spawning season. [NUM] Streams classified as trout waters by the DNR or as great lakes or cold water communities may not be altered from natural background temperature and dissolved oxygen levels to such an extent that trout populations are adversely affected. [...] 3. The dissolved oxygen in great lakes tributaries used by stocked salmonids for spawning runs shall not be lowered below natural background during the period of habitation. [NAR] State has specific numeric DO criteria for specific water bodies ranging from 1.0-7.0 mg/L. [NUM]	
WV	3		Nitrate-N (10 mg/L) for human health. [NUM] Nitrite-N (1.0 mg/L) for WWF and wetlands; (0.06 mg/L) for trout waters (aquatic life). [NUM]	Total phosphorus shall not exceed 40 µg/l for warm water lakes and 30 µg/l for cool water lakes. [NUM]		Chlorophyll-a shall not exceed 20 µg/L for warm water lakes and 10 µg/L for cool water lakes during the period May 1–October 31.. [NUM]				A lake shall not be considered impaired based upon an average TP concentration in excess of the criterion, unless the chlorophyll-a criterion is also exceeded. [NAR]	Not less than 5 mg/L at any time (human health). [NUM] Ohio River main stem (aquatic life) - the average concentration shall not be less than 5.0 mg/L per calendar day and shall not be less than 4.0 mg/L at any time or place outside any established mixing zone - provided that a minimum of 5.0 mg/L at any time is maintained during the 4/15-6/ 15 spawning season. [NUM] Not less than 7.0 mg/L in spawning areas and in no case less than 6.0 mg/L at any time. [NUM]	
WY	8		Nitrates as N (≤ 10,000 µg/L) for human health. [NUM]									State has specific numeric DO criteria for specific water bodies ranging from 3.0 mg/L to 6.0 mg/L for CWF and 4.0 mg/L to 9.5 mg/L for WWF. [NUM]	
# of States		12	36	28	5	12	20	1	0	0	3	47	8
# of States		3	1	6	2	1	7	19	8	10	20	12	3
# of States		2	0	5	1	1	0	0	0	0	0	1	0

No turbidity in such amounts or concentrations that would prevent the full support of uses. [NAR] Numeric turbidity, varies by Class and type of water (10-25 NTU) annual average under dry weather base-flow conditions. [NUM]	Total suspended solids, scum, floating solids, color, odor, and taste - none in such concentrations or combinations that would prevent the full support of uses or have an adverse effect on the taste or odor of fish. [NAR]						Effective May 13, 2008	http://water.epa.gov/scitech/swguidance/standards/wqslibrary/vt_index.cfm	Effective December 30, 2011	http://www.nrb.state.vt.us/wrp/publications/wqs.pdf		
For specific waters: 5 NTU over background when the background is 50 NTU or less; or a 10 percent increase in turbidity when the background turbidity is more than 50 NTU. [NUM] For specific waters: 10 NTU over background when the background is 50 NTU or less; or a 20 percent increase in turbidity when the background turbidity is more than 50 NTU. [NUM]	Toxic, radioactive, or deleterious material concentrations must be below those which have the potential, either singularly or cumulatively, to adversely affect characteristic water uses, cause acute or chronic conditions to the most sensitive biota dependent upon those waters, or adversely affect public health. [NAR]				"Natural conditions" or "natural background levels" means surface water quality that was present before any human-caused pollution. When estimating natural conditions in the headwaters of a disturbed watershed it may be necessary to use the less disturbed conditions of a neighboring or similar watershed as a reference condition.	*Nutrient Criteria Development in Washington State - Phosphorus* Washingon Nutirent Control Plan TP criteria based on trophic state	11/18/1997	http://water.epa.gov/scitech/swguidance/standards/wqslibrary/wa_index.cfm	Amended May 9, 2011; Revised January 2012	http://www.ecy.wa.gov/programs/wq/swqs/index.html		
	Floating or submerged debris, oil, scum or other material shall not be present in such amounts as to interfere with public rights in waters of the state; materials producing color, odor, taste or unsightliness shall not be present in such amounts as to interfere with public rights in waters of the state; substances in concentrations or combinations which are toxic or harmful to humans shall not be present in amounts found to be of public health significance, nor shall substances be present in amounts which are acutely harmful to animal, plant or aquatic life. [NAR] Numeric criteria for substances causing taste and odor ranging from 0.04 µg/L to 5000 µg/L. [NUM]		TP criteria for rivers and streams with unidirectional flow.		"Natural conditions" means the normal daily and seasonal variations in climatic and atmospheric conditions, and the existing physical and chemical characteristics of a water or the course in which it flows.			http://water.epa.gov/scitech/swguidance/standards/wqslibrary/wi_index.cfm		http://dnr.wi.gov/org/water/wm/wqs/standards.htm		
Shall not exceed 10 NTU over background turbidity when the background is 50 NTU or less, or have more than a 10% increase in turbidity (plus 10 NTU minimum) when the background turbidity is more than 50 NTU. [NUM]	Free from distinctly visible floating or settleable solids, suspended solids, scum, foam or oily slicks; odors in the vicinity of the waters; taste or odor that would adversely affect the designated uses of the affected waters; distinctly visible color; algae blooms or concentrations of bacteria which may impair or interfere with the designated uses of the affected waters; and no significant adverse impact to the chemical, physical, hydrologic, or biological components of aquatic ecosystems. [NAR] Odor shall not exceed a daily avg. oder number of 8 at 104°F. [NUM]						Effective December 16 2011	http://water.epa.gov/scitech/swguidance/standards/wqslibrary/wv_index.cfm	Effective June 27, 2011	http://www.dep.wv.gov/WWE/Programs/wqs/Pages/default.aspx		
CWF - 10 NTU WWF - 15 NTU. [NUM] Temporary increases in turbidity that do not negatively affect existing uses are permitted. [NAR]	In all waters, floating and suspended solids, taste, odor, and color producing substances attributable to or influenced by the activities of man shall not be present in quantities negatively impacting the use of the water body. [NAR]					Wyoming Nutrient Criteria Development Plan - April 4, 2008	Effective January 25, 2002	http://water.epa.gov/scitech/swguidance/standards/wqslibrary/wy_index.cfm	Effective January 25, 2002	http://deq.state.wy.us/wqd/watershed/surfacestandards/index.asp		
28	9	0	0	0	0	1						
21	44	0	0	0	0	1						
0	0	0	0	0	0	0						

Cell: V1
Comment: Use this for information about EPA and state documentation

Cell: AA1
Comment: Use this column for other notes about the state's WQS

Cell: T2
Comment: Use these for terms used in narrative criteria.